

m



Sizes 26 ... 125

180°

Weight 0.13 kg ... 6.72 kg



Gripping moment 2 Nm ... 295 Nm



Angle per jaw 30° ... 90°



Workpiece weight 0.3 kg ... 9.12 kg

Application example



Gripper-swivel combination for handling of small pins. The 180° opening angle of the gripper replaces a stroke unit which is normally necessary.



2-Finger Radial Gripper PRG Rotary Actuator SRU-plus



Universal Gripper

180°-Radial Gripper with powerful 1-shift slotted link gear and oval piston

Field of application

for areas of application which, in addition to a large gripping force, require the shortest possible motion sequences through the radial design of the jaw stroke

Your advantages and benefits

Kinematics

The 1-shift slotted link gear assures a consistant closing moment from -5° to $+7^{\circ}$.

Optimized cycle time due to innovative dampening directly integrated drive chain

Maximum power density

for higher closing moments, longer and stable gripper fingers

Many options assure a higher degree of flexibility

Adjusted to the individual application, the PRG is also available with a mechanic gripping force maintenance device, as a high-temperature version, and with three opening angle versions $30^{\circ}/60^{\circ}/90^{\circ}$.

Air supply via hose-free direct connection or screw connections

for the flexible supply of compressed air in all automation systems



~ <mark>180°</mark> ¶

General note to the series

Principle of function Crank drive

Housing material Aluminum alloy, hard-anodized

Base jaw material Steel

Actuation

pneumatic, with filtered compressed air (10 microns): dry, lubricated or non-lubricated Pressure medium: Required quality class of compressed air according to DIN ISO 8573-1: 6 4 4

Warranty

24 months (details, general terms and conditions and operation manuals can be downloaded under www.schunk.com)

Scope of delivery

Centering sleeves, O-rings for direct connection, assembly and operating manual with manufacturer's declaration



Sectional diagram





Housing

weight-optimized through application of hard-anodized, high-strength aluminum alloy



for the connection of workpiece-specific gripper fingers



Slotted link gear for very high gripping forces when the workpiece is contacted

🕘 Damping

decoupled, for shorter cycle times



Monitoring

integrated end position monitoring with magnetic switches

Functional description

The patented 1-shift slotted gear shift transfers this motion into a powerful closing moment. The closing moment is additionally reinforced by the curved shape of the guidance.

The crank system assures a force-extended jaw stroke behavior, but also a constant closing moment via a large range of closing angle.

Options and special information

180° radial grippers are advantageous since further stroke motions are no more necessary. Since every jaw swivels away by 90°, the gripper is outside of the working area, and a stroke motion back of the whole gripper is no more necessary.



Accessories

Accessories from SCHUNK – the suitable supplement for maximum functionality, reliability and performance of all automation modules.









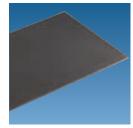
Inductive proximity switches







Gripper pads



Pressure maintenance valve



Tor the exact size of the required accessories, availability of this size and the designation and ID, please refer to the additional views at the end of the size in question. You will find more detailed information on our accessory range in the "Accessories" catalog section.

General note to the series

Gripping moment

Gripping moment is the arithmetic total of gripping moments for each claw jaw.

Finger length

The finger length is measured from the upper edge of the gripper housing in direction to the main axis. If the max. admissible finger length is exceeded, the speed of jaw motions have to be reduced and/or the opening angle has to be diminished, as it is done with heavy fingers. The service life of the gripper can shorten.

Repeat accuracy

is defined as the spread of the limit position after 100 consecutive strokes.

Workpiece weight

The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g. Considerably heavier workpiece weights are permitted with form-fit gripping.

Closing and opening times

Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.





Sensor Distributor

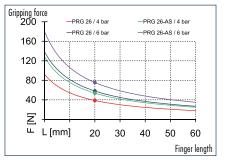




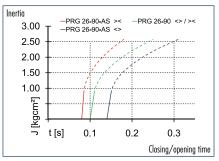
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



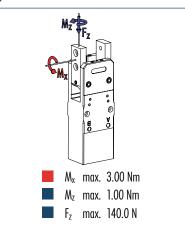
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



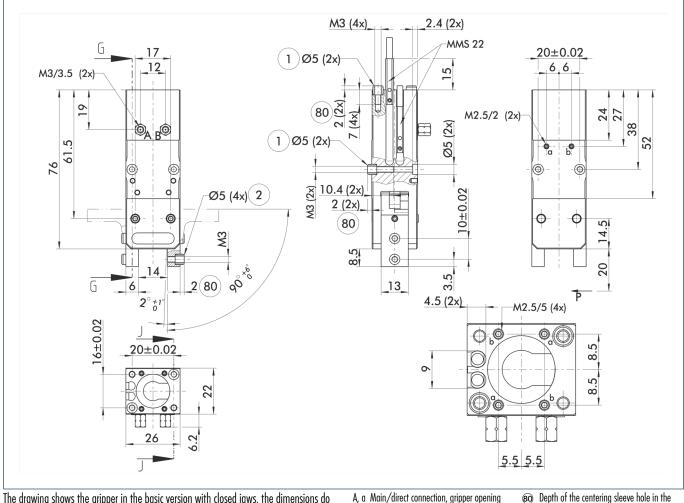
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 26-30	PRG 26-30-AS	PRG 26-60	PRG 26-60-AS	PRG 26-90	PRG 26-90-AS
ID		0303651	0303661	0303691	0303701	0303671	0303681
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	2	2.6	2	2.6	2	2.6
Spring-actuated closing moment	[Nm]		0.6		0.6		0.6
Weight	[kg]	0.13	0.135	0.13	0.135	0.13	0.135
Recommended workpiece weight	[kg]	0.3	0.38	0.3	0.38	0.3	0.38
Air consumption per double stroke	[cm ³]	6.5	6.5	7.5	7.5	9	9
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.03	0.03	0.07	0.05	0.1	0.08
Opening time	[s]	0.03	0.05	0.07	0.09	0.1	0.14
Max. permitted finger length	[mm]	40	40	40	40	40	40
Max. mass moment of inertia per jaw	[kgcm ²]	0.86	0.86	0.86	0.86	0.86	0.86
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°[]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05	0.05	0.05	0.05	0.05
OPTIONS and their characte	eristics						
High-temperature version		39303651	39303661	39303691	39303701	39303671	39303681
Min./max. ambient temperature	[°[]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



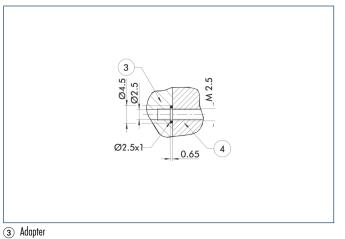
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- (1) The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).
- A, a Main/direct connection, gripper opening B, b Main/direct connection, gripper closing

matching part

- (1) Gripper connection
- (2) Finger connection

Hose-free direct connection



⁽⁴⁾ Gripper

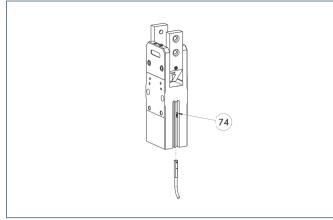
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.





Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Programmable magnetic switch



74 Stop for MMS-P

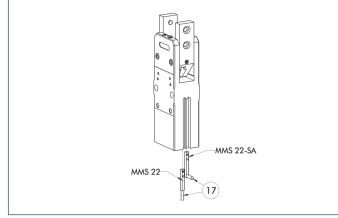
Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

Description	ID	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cables		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor Distributor		
V2-M8-4P-2XM8-3P	0301380	
Diana mata tha minimum na		

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

(1) Per gripper one sensor (closer/NO) is required, optionally a cable extension.

Electronic magnetic switches



17 Cable outlet

End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches with	lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Reed Switches		
RMS 22-S-M8	0377720	•
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BWO8-L 3P-0300-NPN	0301602	
KA BWO8-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BW08-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

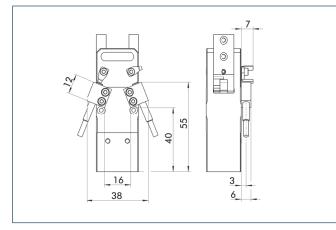
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



180°



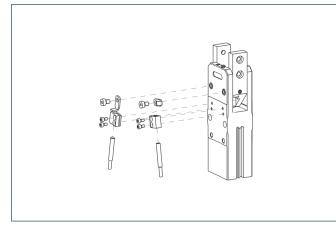
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 26-IN40	0303621

Inductive proximity switches



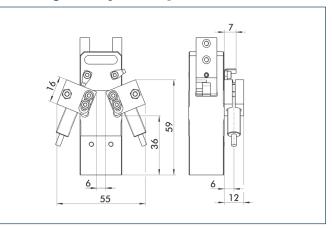
End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
AS-PRG 26-IN40	0303621	
Inductive proximity switches		
IN 40-S-M8	0301474	•
IN 40-S-M12	0301574	
INK 40-S	0301555	
IN 40-S-M5-PNP	0301491	
IN 40-S-M5-NPN	0301492	
Inductive proximity switch with lo	ateral outlet	
IN 40-S-M12-SA	0301577	
IN 40-S-M8-SA	0301473	•
INK 40-S-SA	0301565	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

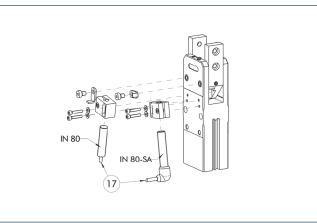
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 26-IN80	0304132

Inductive proximity switches



1 Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch	h	
AS-PRG 26-IN80	0304132	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with I	ateral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

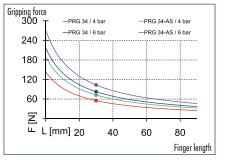
Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



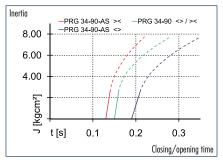
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



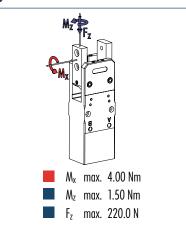
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



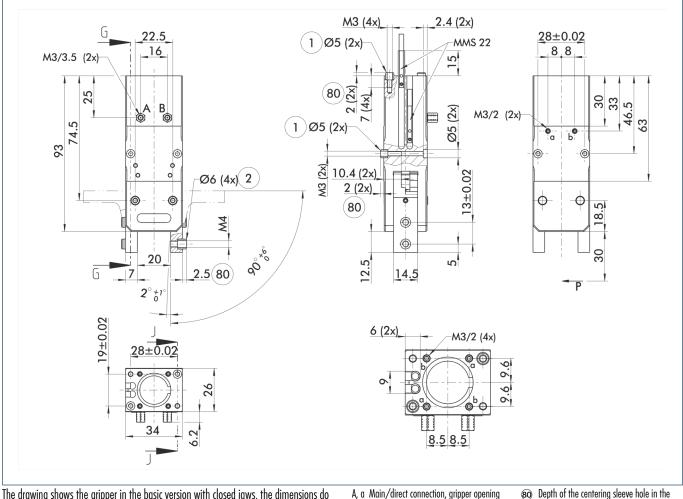
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 34-30	PRG 34-30-AS	PRG 34-60	PRG 34-60-AS	PRG 34-90	PRG 34-90-AS
ID		0303652	0303662	0303692	0303702	0303672	0303682
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	4	5	4	5	4	5
Spring-actuated closing moment	[Nm]		1		1		1
Weight	[kg]	0.24	0.25	0.24	0.25	0.24	0.25
Recommended workpiece weight	[kg]	0.42	0.53	0.42	0.53	0.42	0.53
Air consumption per double stroke	[cm ³]	12	12	14.5	14.5	17.5	17.5
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.05	0.04	0.1	0.09	0.15	0.13
Opening time	[s]	0.05	0.06	0.1	0.13	0.15	0.19
Max. permitted finger length	[mm]	60	60	60	60	60	60
Max. mass moment of inertia per jaw	[kgcm ²]	2.58	2.58	2.58	2.58	2.58	2.58
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°[]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05	0.05	0.05	0.05	0.05
OPTIONS and their characte	eristics						
High-temperature version		39303652	39303662	39303692	39303702	39303672	39303682
Min./max. ambient temperature	[°[]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



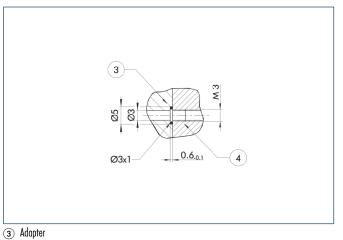
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- (1) The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force
- A, a Main/direct connection, gripper opening B, b Main/direct connection, gripper closing

matching part

- (1) Gripper connection
- (2) Finger connection
- maintenance device (see "Accessories" catalog section).

Hose-free direct connection



⁽⁴⁾ Gripper

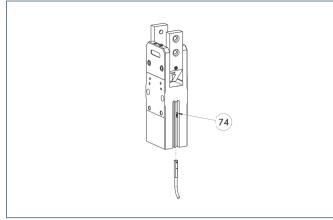
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.





Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Programmable magnetic switch



⑦④ Stop for MMS-P

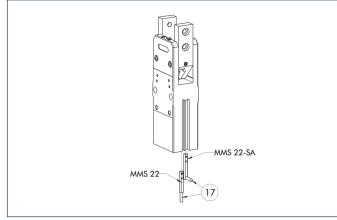
Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

Description	ID	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cables		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor Distributor		
V2-M8-4P-2XM8-3P	0301380	
Diana mata tha minimum na		

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

(1) Per gripper one sensor (closer/NO) is required, optionally a cable extension.

Electronic magnetic switches



17 Cable outlet

End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches with	lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Reed Switches		
RMS 22-S-M8	0377720	•
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BG08-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BWO8-L 3P-0300-NPN	0301602	
KA BWO8-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BW08-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

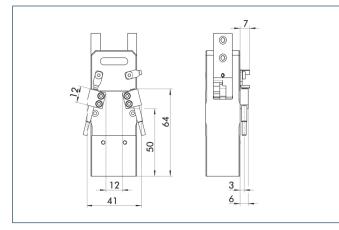


180°





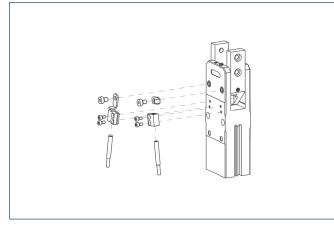
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 34-IN40	0303622

Inductive proximity switches



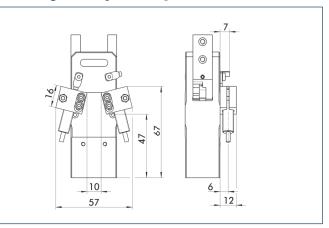
End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch	1	
AS-PRG 34-IN40	0303622	
Inductive proximity switches		
IN 40-S-M8	0301474	•
IN 40-S-M12	0301574	
INK 40-S	0301555	
IN 40-S-M5-PNP	0301491	
IN 40-S-M5-NPN	0301492	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

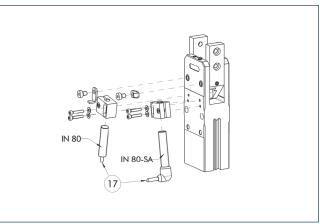
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 34-IN80	0304133

Inductive proximity switches



17 Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity swi	tch	
AS-PRG 34-IN80	0304133	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with	lateral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

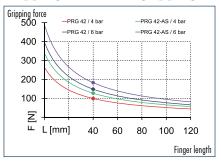
Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



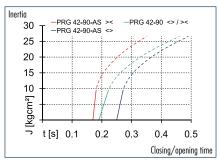
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



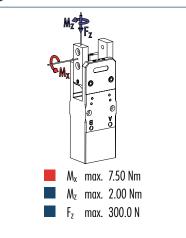
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



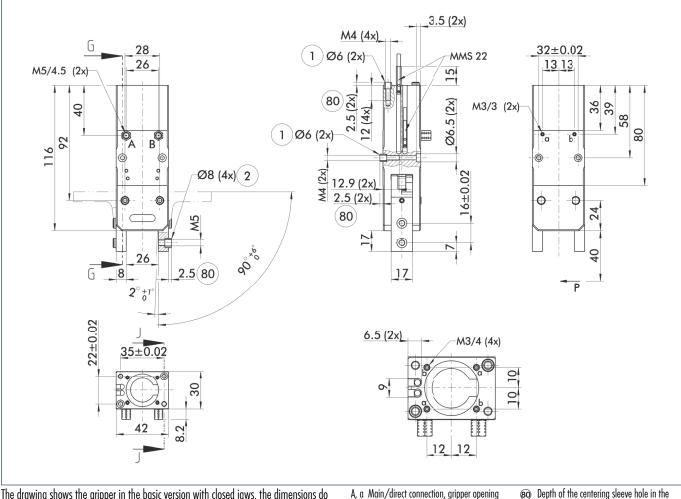
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 42-30	PRG 42-30-AS	PRG 42-60	PRG 42-60-AS	PRG 42-90	PRG 42-90-AS
ID		0303653	0303663	0303693	0303703	0303673	0303683
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	9.5	11.7	9.5	11.7	9.5	11.7
Spring-actuated closing moment	[Nm]		2.2		2.2		2.2
Weight	[kg]	0.41	0.43	0.41	0.43	0.41	0.43
Recommended workpiece weight	[kg]	0.76	0.93	0.76	0.93	0.76	0.93
Air consumption per double stroke	[cm ³]	29	29	34	34	39	39
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.06	0.06	0.13	0.11	0.19	0.17
Opening time	[s]	0.06	0.08	0.13	0.17	0.19	0.25
Max. permitted finger length	[mm]	80	80	80	80	80	80
Max. mass moment of inertia per jaw	[kgcm ²]	8.85	8.85	8.85	8.85	8.85	8.85
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°[]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05	0.05	0.05	0.05	0.05
OPTIONS and their characte	eristics						
High-temperature version		39303653	39303663	39303693	39303703	39303673	39303683
Min./max. ambient temperature	[°[]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



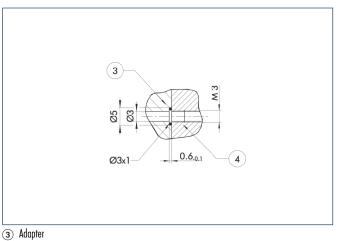
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

B, b Main/direct connection, gripper closing

matching part

- 1 Gripper connection
- (2) Finger connection
- The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).

Hose-free direct connection



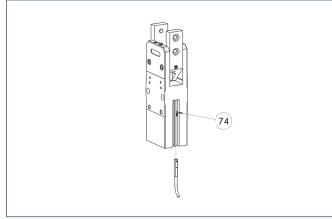
(4) Gripper

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.



Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Programmable magnetic switch



⑦④ Stop for MMS-P

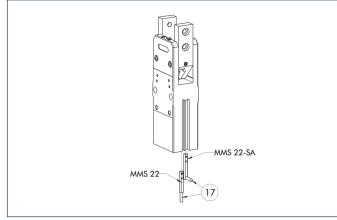
Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

Description	ID	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cables		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor Distributor		
V2-M8-4P-2XM8-3P	0301380	

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

(1) Per gripper one sensor (closer/NO) is required, optionally a cable extension.

Electronic magnetic switches



17 Cable outlet

End position monitoring for mounting in the C-slot

Electronic magnetic switches MMS 22-S-M5-PNP 0301438 MMS 22-S-M5-PNP 0301439 MMS 22-S-M8-PNP 0301432 MMS 22-S-M8-PNP 0301433 MMS 22-S-M8-PNP 0301433 MMS 22-S-M8-PNP 0301434 MMS 22-S-M8-PNP 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA MMS 22-S-M5-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301444 MMS 22-S-M8-PNP-SA 0301445 Reed Switches Rms RMS 22-S-NB 0301445 Reed Switches RMS 22-S-M8 RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 KA BG05-L 3P-0300 0301622 KA BG08-L 3P-0300-PNP 0301623 KA BW08-L 3P-0300-PNP 0301502 KA BW08-L 3P-0300-PNP 0301502 KA BW08-L 3P-0500-P	Description	ID	Recommended product
MMS 22-S-M5-NPN 0301439 MMS 22-S-M8-PNP 0301432 • MMS 22-S-M8-NPN 0301433 • MMS 22-S-M8-NPN 0301433 • MMSK 22-S-NPP 0301434 • MMSK 22-S-NPN 0301435 • Electronic magnetic switches with lateral cable outlet • • MMS 22-S-M5-PNP-SA 0301448 • MMS 22-S-M5-NP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301443 • MMS 22-S-M8-PNP-SA 0301444 • MMSK 22-S-NPN-SA 0301445 • Reed Switches • • • RMS 22-S-M8 0377720 • • Connection cables • • • KA BG05L 3P-0300 0301652 KA BG08L 3P-0300-PNP 0301622 KA BW08L 3P-0300-PNP 0301602 KA BW08L 3P-0300-PN	Electronic magnetic switches		
MMS 22-S-M8-PNP 0301432 • MMS 22-S-M8-NPN 0301433 • MMSK 22-S-NPP 0301434 • MMSK 22-S-NPN 0301435 • Electronic magnetic switches with lateral cable outlet • • MMS 22-S-M5-PNP-SA 0301448 • • MMS 22-S-M5-PNP-SA 0301449 • • MMS 22-S-M8-PNP-SA 0301442 • • MMS 22-S-NPN-SA 0301443 • • MMS 22-S-NPN-SA 0301443 • • MMS 22-S-NPN-SA 0301445 • • Reed Switches • • • • RMS 22-S-NB8 0377720 • • • Connection cables • • • • • KA BG08-L 3P-0300-PNP 0301622	MMS 22-S-M5-PNP	0301438	
MMS 22-S-M8-NPN 0301433 MMSK 22-S-NP 0301434 MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301444 MMS 22-S-M8-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 RMS 22-S-M8 03077720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300 0301623 KA BG08-1 3P-0300 0301623 KA BW05-1 3P-0300 0301620 KA BW08-1 3P-0300-PNP 0301620 KA BW08-1 3P-0300-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 Cable extensions KV BW08-S608 3P-0030-PNP	MMS 22-S-M5-NPN	0301439	
MMSK 22-S-PNP 0301434 MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-MS-PNP-SA MMS 22-S-MS-PNP-SA 0301448 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMSK 22-S-M8-PNP-SA 0301444 MMSK 22-S-M8-NPN-SA 0301445 Reed Switches 0301445 Reed Switches 0301652 KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300 0301622 KA BG08-1 3P-0300 0301623 KA BW05-1 3P-0300 0301620 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301502 KA BW08-1 3P-0300-NPN 0301502 KA BW08-1 3P-0500-PNP 0301502 Cable extensions KV BW08-S608 3P-0030-PNP KV BW08-S608 3P-0030-PNP 0301495 KV BW08-S608 3P-0100-PNP 0301495	MMS 22-S-M8-PNP	0301432	•
MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301449 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301443 • MMS 22-S-M8-PNP-SA 0301443 • MMS 22-S-M8-PNP-SA 0301444 • MMSK 22-S-PNP-SA 0301444 • MMSK 22-S-NPN-SA 0301445 • Reed Switches • • RMS 22-S-M8 0377720 • Connection cables • • KA BG05-1 3P-0300 0301652 • KA BG084: 3P-0300-PNP 0301622 • KA BG084: 3P-0300-PNP 0301623 • KA BW08-1 3P-0300 0301650 • KA BW084: 3P-0300-PNP 0301620 • KA BW084: 3P-0500-PNP 0301502 • KA BW084: 3P-0500-PNP 0301502 • Cable extensions • • KV BW08-S608 3P-0030-PNP	MMS 22-S-M8-NPN	0301433	
Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMS 22-S-M8-PNP-SA 0301444 MMSK 22-S-PNP-SA 0301444 MMSK 22-S-PNP-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300 0301622 KA BG08-1 3P-0300 0301623 KA BW05-1 3P-0300 0301650 KA BW08-1 3P-0300-PNP 0301620 KA BW08-1 3P-0300-PNP 0301602 KA BW08-1 3P-0300-PNP 0301504 KA BW08-1 3P-0300-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMSK 22-S-PNP	0301434	
MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-NPN-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches 8 RMS 22-S-M8 0377720 Connection cables 9 KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300 0301652 KA BG08-1 3P-0300 0301623 KA BW05-1 3P-0300 0301623 KA BW05-1 3P-0300 0301602 KA BW08-1 3P-0300 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301509 KA BW08-1 3P-0300-NPN 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 03014	MMSK 22-S-NPN	0301435	
MMS 22-S-M5-NPN-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300-PNP 0301622 KA BG08-1 3P-0300 0301652 KA BW05-1 3P-0300 0301650 KA BW05-1 3P-0300 0301650 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301509 KA BW08-1 3P-0300-NPN 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KA BW08-1 3P-0500-PNP 0301502 KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	Electronic magnetic switches with	n lateral cable outlet	
MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-NPN-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300 0301622 KA BG08-1 3P-0300-PNP 0301623 KA BG08-1 3P-0300-PNP 0301620 KA BW05-1 3P-0300 0301650 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300-PNP 0301622 KA BG08-1 3P-0300-PNP 0301623 KA BW05-1 3P-0300 0301650 KA BW05-1 3P-0300 0301650 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301594 KA BW08-1 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMS 22-S-M5-NPN-SA	0301449	
MMSK 22-S-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300-PNP 0301622 KA BG08-1 3P-0300-PNP 0301623 KA BW05-1 3P-0300 0301650 KA BW05-1 3P-0300 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-PNP 0301509 KA BW08-1 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMS 22-S-M8-PNP-SA	0301442	•
MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW08-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-NPN 0301504 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502 Cable extensions Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMS 22-S-M8-NPN-SA	0301443	
Reed Switches 0377720 RMS 22-5-M8 0377720 Connection cables KA BG05-1 3P-0300 0301652 KA BG08-1 3P-0300-PNP 0301622 KA BG08-1 3P-0300-PNP 0301623 KA BW08-1 3P-0300 0301650 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301602 KA BW08-1 3P-0300-NPN 0301594 KA BW08-1 3P-0500-NPN 9641116 KA BW08-1 3P-0500-NPN 9641116 KA BW08-1 3P-0500-NPN 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	MMSK 22-S-PNP-SA	0301444	
RMS 22-S-M8 0377720 • Connection cables		0301445	
Connection cables KA BG05-I 3P-0300 0301652 KA BG08-I 3P-0300-PNP 0301622 KA BG08-I 3P-0300-PNP 0301623 KA BW05-I 3P-0300 0301650 KA BW08-I 3P-0300-NPN 0301602 KA BW08-I 3P-0300-NPN 0301602 KA BW08-I 3P-0300-NPN 0301594 KA BW08-I 3P-0500-NPN 9641116 KA BW08-I 3P-0500-NPN 9641116 KA BW08-I 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	Reed Switches		
KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	RMS 22-S-M8	0377720	•
KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	Connection cables		
KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 9641116 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	KA BG05-L 3P-0300	0301652	
KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-S608 3P-0030-PNP KV BW08-S608 3P-0100-PNP 0301495 KV BW08-S608 3P-0100-PNP 0301496	KA BGO8-L 3P-0300-PNP	0301622	
KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0100-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496			
KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496	KA BW08-L 3P-0300-NPN	0301602	
KA BW08-L 3P-0500-PNP 0301502 Cable extensions KV BW08-S608 3P-0030-PNP 0301495 KV BW08-S608 3P-0100-PNP 0301496			
Cable extensions KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496		9641116	
KV BW08-SG08 3P-0030-PNP 0301495 KV BW08-SG08 3P-0100-PNP 0301496		0301502	
KV BW08-SG08 3P-0100-PNP 0301496			
KV BW08-SG08 3P-0200-PNP 0301497			
	KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

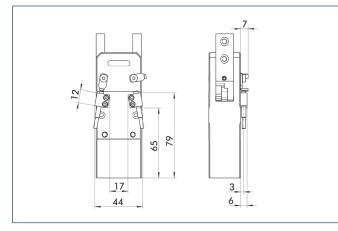


180°

1042



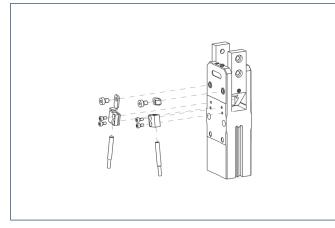
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 42-IN40	0303623

Inductive proximity switches



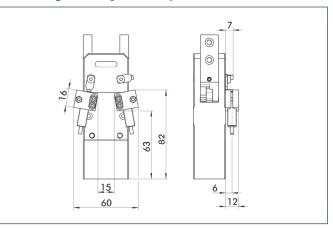
End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switc	h	
AS-PRG 42-IN40	0303623	
Inductive proximity switches		
IN 40-S-M8	0301474	•
IN 40-S-M12	0301574	
INK 40-S	0301555	
IN 40-S-M5-PNP	0301491	
IN 40-S-M5-NPN	0301492	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

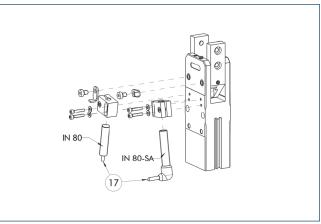
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 42-IN80	0304133

Inductive proximity switches



1 Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity swite	ch	
AS-PRG 42-IN80	0304133	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with	lateral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

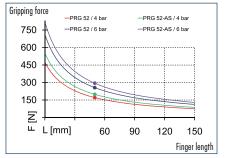
Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



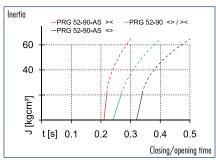
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



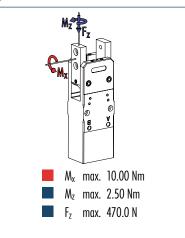
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



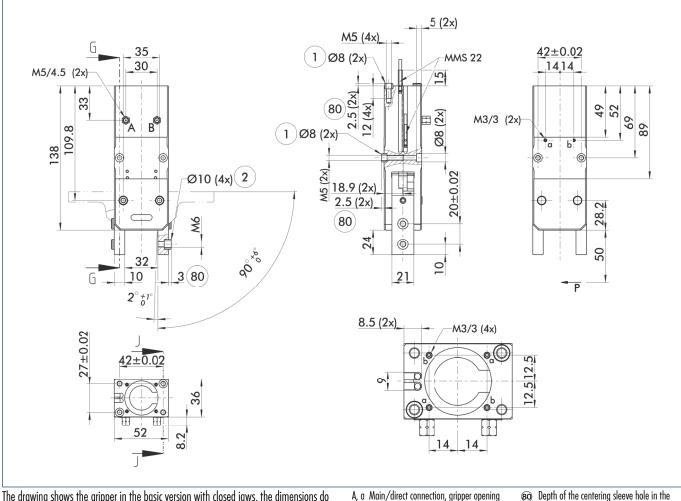
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 52-30	PRG 52-30-AS	PRG 52-60	PRG 52-60-AS	PRG 52-90	PRG 52-90-AS
ID		0303654	0303664	0303694	0303704	0303674	0303684
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	20	23	20	23	20	23
Spring-actuated closing moment	[Nm]		3		3		3
Weight	[kg]	0.77	0.8	0.76	0.8	0.75	0.79
Recommended workpiece weight	[kg]	1.3	1.5	1.3	1.5	1.3	1.5
Air consumption per double stroke	[cm ³]	52	52	61	61	72	72
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.08	0.07	0.16	0.14	0.24	0.21
Opening time	[S]	0.08	0.11	0.16	0.21	0.24	0.32
Max. permitted finger length	[mm]	100	100	100	100	100	100
Max. mass moment of inertia per jaw	[kgcm ²]	21.55	21.55	21.55	21.55	21.55	21.55
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°[]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05	0.05	0.05	0.05	0.05
OPTIONS and their characte	eristics						
High-temperature version		39303654	39303664	39303694	39303704	39303674	39303684
Min./max. ambient temperature	[°[]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



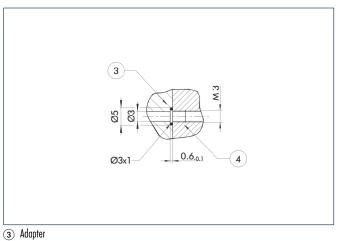
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).
- B, b Main/direct connection, gripper closing

matching part

- 1 Gripper connection
- Finger connection

Hose-free direct connection



(4) Gripper

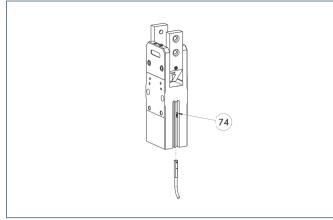
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.



<mark>180°</mark>

Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Programmable magnetic switch



⑦④ Stop for MMS-P

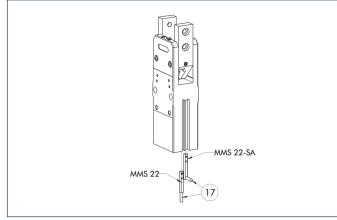
Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

Description	ID	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cables		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor Distributor		
V2-M8-4P-2XM8-3P	0301380	
N		

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

(1) Per gripper one sensor (closer/NO) is required, optionally a cable extension.

Electronic magnetic switches



17 Cable outlet

End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		i i i i i i i i i i i i i i i i i i i
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches wit	h lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Reed Switches		
RMS 22-S-M8	0377720	•
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BGO8-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BW08-L 3P-0300-NPN	0301602	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BW08-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	
	· I C I ·	1 11

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

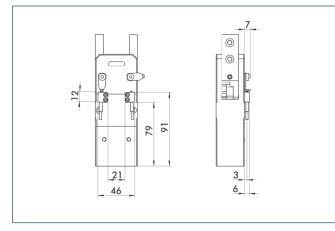
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



180°



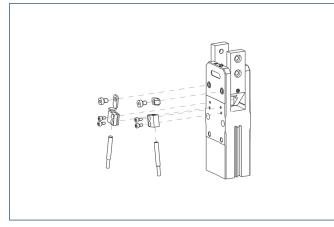
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 52-IN40	0303624

Inductive proximity switches



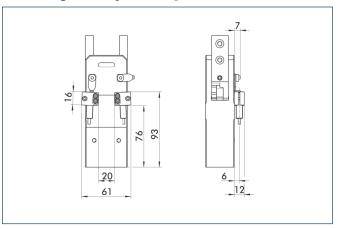
End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity swite	:h	
AS-PRG 52-IN40	0303624	
Inductive proximity switches		
IN 40-S-M8	0301474	•
IN 40-S-M12	0301574	
INK 40-S	0301555	
IN 40-S-M5-PNP	0301491	
IN 40-S-M5-NPN	0301492	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

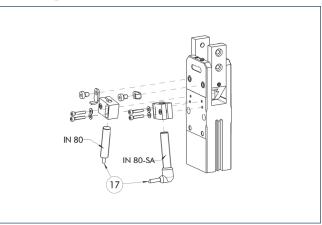
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 52-IN80	0304135

Inductive proximity switches



1 Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity swit	tch	
AS-PRG 52-IN80	0304135	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with	lateral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

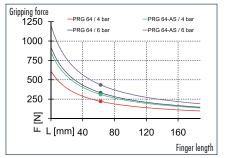
Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



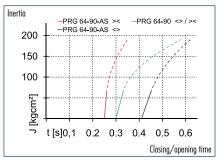
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



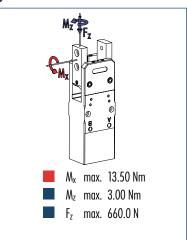
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



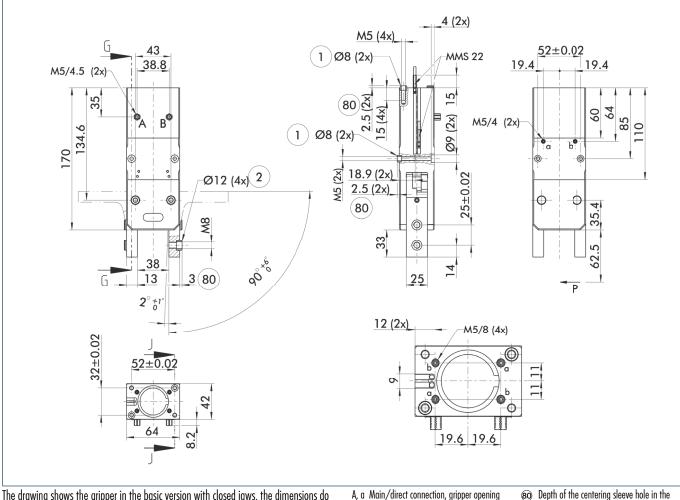
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 64-30	PRG 64-30-AS	PRG 64-60	PRG 64-60-AS	PRG 64-90	PRG 64-90-AS
ID		0303655	0303665	0303695	0303705	0303675	0303685
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
_Closing moment	[Nm]	32.5	42.5	32.5	42.5	32.5	42.5
Spring-actuated closing moment	[Nm]		10		10		10
Weight	[kg]	1.35	1.42	1.34	1.41	1.33	1.4
Recommended workpiece weight	[kg]	1.69	2.21	1.69	2.21	1.69	2.21
Air consumption per double stroke	[cm ³]	88	88	102	102	120	120
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.1	0.08	0.2	0.17	0.3	0.25
Opening time	[s]	0.1	0.14	0.2	0.27	0.3	0.41
Max. permitted finger length	[mm]	125	125	125	125	125	125
Max. mass moment of inertia per jaw	[kgcm ²]	63.37	63.37	63.37	63.37	63.37	63.37
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°(]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.05	0.05	0.05	0.05	0.05	0.05
OPTIONS and their characte	ristics						
High-temperature version		39303655	39303665	39303695	39303705	39303675	39303685
Min./max. ambient temperature	[°(]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



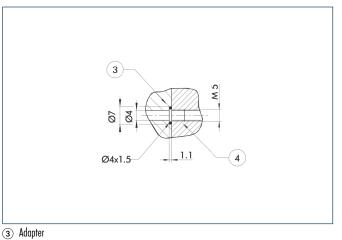
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- B, b Main/direct connection, gripper closing

matching part

- (1) Gripper connection
- (2) Finger connection
- (1) The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).

Hose-free direct connection



⁽⁴⁾ Gripper

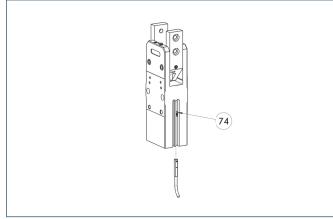
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.





Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Programmable magnetic switch



74 Stop for MMS-P

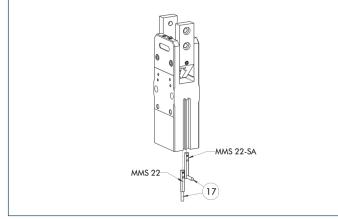
Position monitoring with two programmable positions per sensor. The end position monitoring is mounted in the C-slot.

Description	ID	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cables		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-0500	0307765	
KA BW08-L 4P-1000	0307766	
Sensor Distributor		
V2-M8-4P-2XM8-3P	0301380	

(i) Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

① Per gripper one sensor (closer/NO) is required, optionally a cable extension.

Electronic magnetic switches



(17) Cable outlet

End position monitoring for mounting in the C-slot

Electronic magnetic switches MMS 22-S-M5-PNP 0301438 MMS 22-S-M5-NPN 0301439 MMS 22-S-M8-PNP 0301432 MMS 22-S-M8-PNP 0301433 MMS 22-S-M8-NPN 0301433 MMS 22-S-M8-NPN 0301434 MMS 22-S-M8-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301442 MMS 22-S-M5-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMS 22-S-N8-PNP-SA 0301444 MMS 22-S-N8-NPN-SA 0301445 Reed Switches Reed Switches RMS 22-S-M8 0377720 RMS 22-S-M8 0377720 KA BG08-L 3P-0300 0301652 KA BG08-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301623 KA BW08-L 3P-0300-PNP 0301620 KA BW08-L 3P-0300-PNP 0301602 KA BW08-L 3P-0300-PNP 0301594	Description	ID	Recommended product
MMS 22-S-M5-NPN 0301439 MMS 22-S-M8-PNP 0301432 • MMS 22-S-M8-NPN 0301433 • MMS 22-S-NPN 0301433 • MMSK 22-S-NPN 0301434 • MMSK 22-S-NPN 0301435 • Electronic magnetic switches with lateral cable outlet • • MMS 22-S-M5-PNP-SA 0301448 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-NPN-SA 0301443 • MMS 22-S-NPN-SA 0301443 • MMS 22-S-NPN-SA 0301443 • MMS 22-S-NPN-SA 0301443 • MMSK 22-S-NPN-SA 0301443 • MMSK 22-S-NPN-SA 0301445 • Reed Switches • • RMS 22-S-M8 0377720 • Connection cables • • KA BG08-L 3P-0300 0301652 •	Electronic magnetic switches		
MMS 22-S-M8-PNP 0301432 • MMS 22-S-M8-NPN 0301433 MMSK 22-S-PNP 0301434 MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-N8-PNP-SA 0301443 MMSK 22-S-PNP-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches Reed Switches RMS 22-S-N8 0377720 • Connection cables • KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300-PNP 0301623 KA BW08-L 3P-0300-PNP 0301620 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M5-PNP	0301438	
MMS 22-S-M8-NPN 0301433 MMSK 22-S-NP 0301434 MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMSK 22-S-PNP-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches Reed Switches RMS 22-S-M8 0377720 KA BG05-L 3P-0300 0301652 KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300-PNP 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M5-NPN	0301439	
MMSK 22-S-PNP 0301434 MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMSK 22-S-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches Reed Switches RMS 22-S-M8 0377720 KA BG05-L 3P-0300 0301652 KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301592	MMS 22-S-M8-PNP	0301432	•
MMSK 22-S-NPN 0301435 Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-PNP-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301443 MMS 22-S-M8-NPN-SA 0301444 MMSK 22-S-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches 0301445 RMS 22-S-M8 0377720 • Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-NPN 0301594 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M8-NPN	0301433	
Electronic magnetic switches with lateral cable outlet MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M5-NPN-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 MMS 22-S-M8-PNP-SA 0301443 MMS 22-S-N8-NPN-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300-PNP 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502	MMSK 22-S-PNP	0301434	
MMS 22-S-M5-PNP-SA 0301448 MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-PNP-SA 0301443 • MMS 22-S-M8-PNP-SA 0301443 • MMSK 22-S-PNP-SA 0301444 • MMSK 22-S-NPN-SA 0301445 • Reed Switches • • RMS 22-S-M8 0377720 • Connection cables • • KA BG05-L 3P-0300 0301652 • KA BG08-L 3P-0300-PNP 0301622 • KA BG08-L 3P-0300 0301650 • KA BW08-L 3P-0300-NPN 0301602 • KA BW08-L 3P-0300-NPN 0301594 • KA BW08-L 3P-0500-PNP 0301594 • KA BW08-L 3P-0500-PNP 0301502 •	MMSK 22-S-NPN	0301435	
MMS 22-S-M5-NPN-SA 0301449 MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-NPN-SA 0301443 • MMSK 22-S-NPN-SA 0301444 • MMSK 22-S-NPN-SA 0301445 • Reed Switches • • RMS 22-S-M8 0301445 • Reed Switches • • RMS 22-S-M8 0377720 • Connection cables • • KA BG05-L 3P-0300 0301652 • KA BG08-L 3P-0300-PNP 0301622 • KA BG08-L 3P-0300 0301650 • KA BW08-L 3P-0300-PNP 0301602 • KA BW08-L 3P-0300-PNP 0301594 • KA BW08-L 3P-0500-PNP 0301594 • KA BW08-L 3P-0500-PNP 0301502 •	Electronic magnetic switches with	lateral cable outlet	
MMS 22-S-M8-PNP-SA 0301442 • MMS 22-S-M8-NPN-SA 0301443 MMSK 22-S-PNP-SA 0301443 MMSK 22-S-NPN-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches 8 0377720 • Connection cables 6 6 6 KA BG05-L 3P-0300 0301652 6 6 KA BG08-L 3P-0300-PNP 0301622 6 6 KA BG08-L 3P-0300-PNP 0301623 6 6 KA BG08-L 3P-0300 0301650 6 6 KA BW08-L 3P-0300-NPN 0301602 6 6 KA BW08-L 3P-0300-NPN 0301594 6 6 KA BW08-L 3P-0500-PNP 0301594 6 6 KA BW08-L 3P-0500-PNP 0301502 6 6	MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M8-NPN-SA 0301443 MMSK 22-S-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300-PNP 0301623 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M5-NPN-SA	0301449	
MMSK 22-S-PNP-SA 0301444 MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-PNP 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M8-PNP-SA	0301442	•
MMSK 22-S-NPN-SA 0301445 Reed Switches RMS 22-S-M8 0377720 Connection cables KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0300-PNP 0301623 KA BG08-L 3P-0300 0301650 KA BW08-L 3P-0300 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 0301594 KA BW08-L 3P-0500-PNP 0301502	MMS 22-S-M8-NPN-SA	0301443	
Reed Switches RMS 22-S-M8 0377720 • Connection cables • • KA BG05-L 3P-0300 0301652 • KA BG08-L 3P-0300-PNP 0301622 • KA BG08-L 3P-0300-PNP 0301623 • KA BG08-L 3P-0300 0301650 • KA BW08-L 3P-0300-NPN 0301602 • KA BW08-L 3P-0300-PNP 0301594 • KA BW08-L 3P-0500-PNP 9641116 • KA BW08-L 3P-0500-PNP 0301502 •	MMSK 22-S-PNP-SA	0301444	
RMS 22-S-M8 0377720 • Connection cables	MMSK 22-S-NPN-SA	0301445	
Connection cables O301652 KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-NPN 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	Reed Switches		
KA BG05-L 3P-0300 0301652 KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-PNP 9641116 KA BW08-L 3P-0500-PNP 0301502	RMS 22-S-M8	0377720	•
KA BG08-L 3P-0300-PNP 0301622 KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	Connection cables		
KA BG08-L 3P-0500-PNP 0301623 KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	KA BG05-L 3P-0300	0301652	
KA BW05-L 3P-0300 0301650 KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	KA BGO8-L 3P-0300-PNP	0301622	
KA BW08-L 3P-0300-NPN 0301602 KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP 0301594 KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	KA BW05-L 3P-0300	0301650	
KA BW08-L 3P-0500-NPN 9641116 KA BW08-L 3P-0500-PNP 0301502	KA BW08-L 3P-0300-NPN	0301602	
KA BW08-L 3P-0500-PNP 0301502	KA BW08-L 3P-0300-PNP	0301594	
	KA BW08-L 3P-0500-NPN	9641116	
Cable extensions	KA BW08-L 3P-0500-PNP	0301502	
	Cable extensions		
KV BW08-SG08 3P-0030-PNP 0301495	KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP 0301496			
KV BW08-SG08 3P-0200-PNP 0301497	KV BW08-SG08 3P-0200-PNP	0301497	

(1) Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

() Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

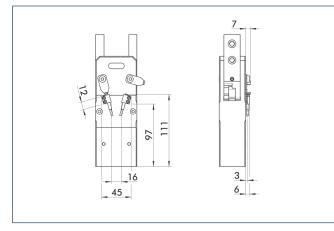






Pneumatic • 2-Finger Radial Gripper • Universal Gripper

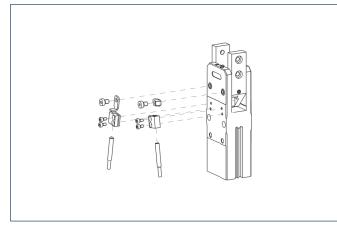
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 64-IN40	0303625

Inductive proximity switches



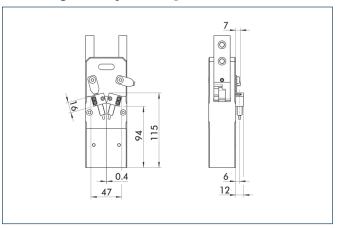
End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch	1	
AS-PRG 64-IN40	0303625	
Inductive proximity switches		
IN 40-S-M8	0301474	•
IN 40-S-M12	0301574	
INK 40-S	0301555	
IN 40-S-M5-PNP	0301491	
IN 40-S-M5-NPN	0301492	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

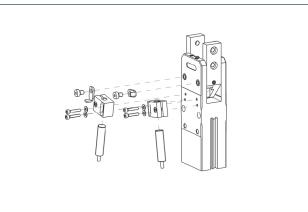
Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 64-IN80	0304136

Inductive proximity switches



End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
AS-PRG 64-IN80	0304136	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

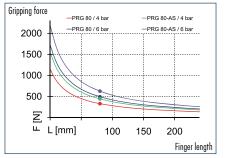
Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



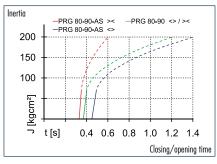
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



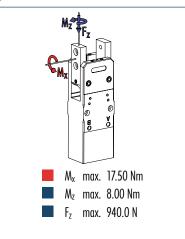
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



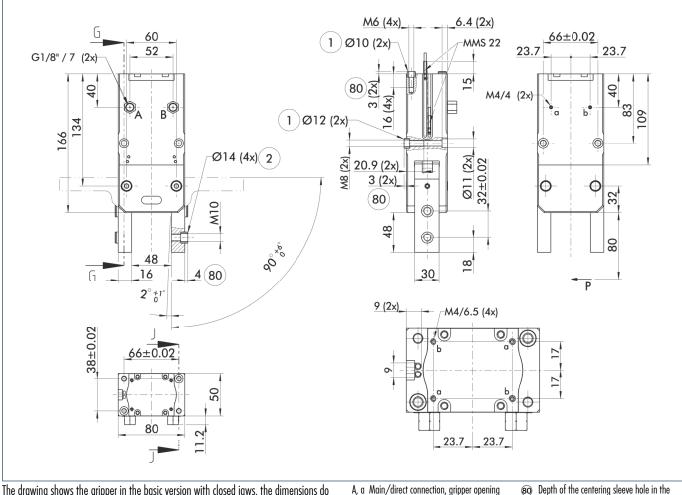
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 80-30	PRG 80-30-AS	PRG 80-60	PRG 80-60-AS	PRG 80-90	PRG 80-90-AS
ID		0303656	0303666	0303696	0303706	0303676	0303686
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	55	70	55	70	55	70
Spring-actuated closing moment	[Nm]		15		15		15
Weight	[kg]	2.17	2.26	2.16	2.25	2.15	2.24
Recommended workpiece weight	[kg]	2.5	3.19	2.5	3.19	2.5	3.19
Air consumption per double stroke	[cm ³]	128	128	143	143	160	160
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.12	0.11	0.25	0.22	0.37	0.33
Opening time	[s]	0.12	0.15	0.25	0.3	0.37	0.45
Max. permitted finger length	[mm]	160	160	160	160	160	160
Max. mass moment of inertia per jaw	[kgcm ²]	66.44	66.44	66.44	66.44	66.44	66.44
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°(]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.1	0.1	0.1	0.1	0.1	0.1
OPTIONS and their characte	eristics						
High-temperature version		39303656	39303666	39303696	39303706	39303676	39303686
Min./max. ambient temperature	[°(]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view

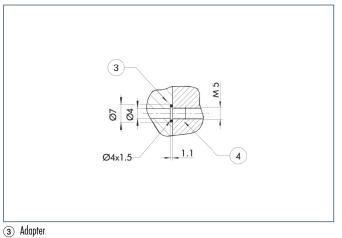


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).
- A, a Main/direct connection, gripper opening B, b Main/direct connection, gripper closing
 - irect connection, gripper closing matching part
- ① Gripper connection

Einger connection

Hose-free direct connection



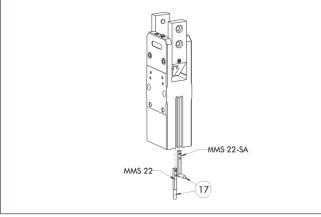
(4) Gripper

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.



Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Electronic magnetic switches



(17) Cable outlet

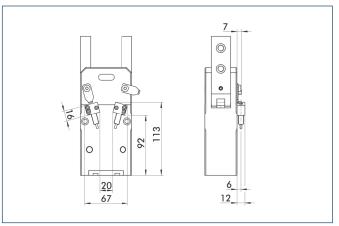
End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches with	n lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BGO8-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BWO8-L 3P-0300-NPN	0301602	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BWO8-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 80-IN80	0303626

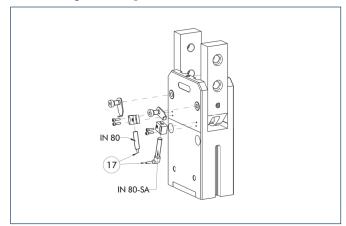
<mark>180°</mark>

You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

Ŧ



Inductive proximity switches



(17) Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch	1	
AS-PRG 80-IN80	0303626	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with le	ateral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

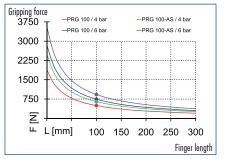
180°



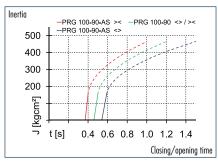
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



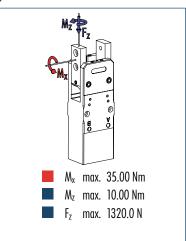
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



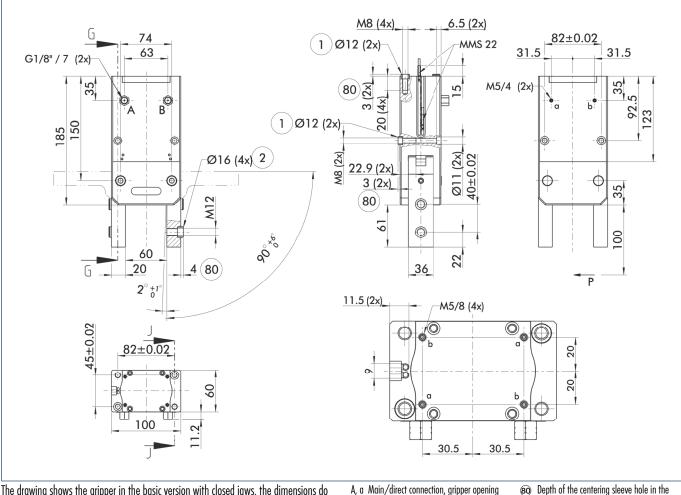
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 100-30	PRG 100-30-AS	PRG 100-60	PRG 100-60-AS	PRG 100-90	PRG 100-90-AS
ID		0303657	0303667	0303697	0303707	0303677	0303687
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
Closing moment	[Nm]	100	125	100	125	100	125
Spring-actuated closing moment	[Nm]		25		25		25
Weight	[kg]	3.67	3.81	3.66	3.8	3.64	3.78
Recommended workpiece weight	[kg]	3.78	4.72	3.78	4.72	3.78	4.72
Air consumption per double stroke	[cm ³]	230	230	260	260	290	290
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.15	0.12	0.31	0.25	0.46	0.37
Opening time	[S]	0.15	0.18	0.31	0.36	0.46	0.54
Max. permitted finger length	[mm]	200	200	200	200	200	200
Max. mass moment of inertia per jaw	[kgcm ²]	155.2	155.2	155.2	155.2	155.2	155.2
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°[]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.1	0.1	0.1	0.1	0.1	0.1
OPTIONS and their characte	eristics						
High-temperature version		39303657	39303667	39303697	39303707	39303677	39303687
Min./max. ambient temperature	[°[]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



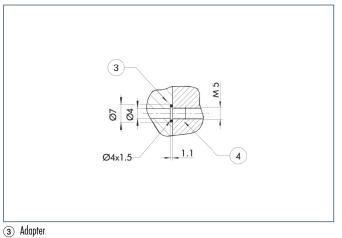
Main view



The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).
- A, a Main/direct connection, gripper opening B, b Main/direct connection, gripper closing
 - oper closing matching part
- ① Gripper connection
- Finger connection

Hose-free direct connection



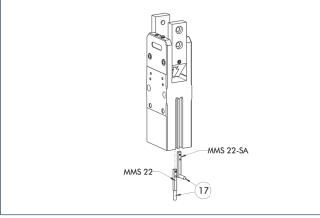
(4) Gripper

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.



Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Electronic magnetic switches



(17) Cable outlet

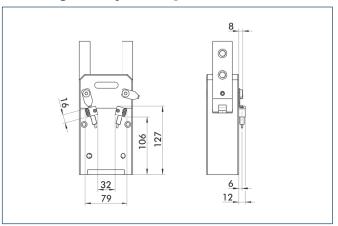
End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches with	lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BGO8-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BW08-L 3P-0300-NPN	0301602	
KA BWO8-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BW08-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 100-IN80	0303627

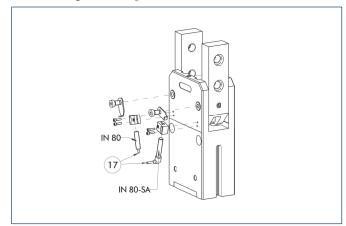
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



Ŧ



Inductive proximity switches



(17) Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
AS-PRG 100-IN80	0303627	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with la	teral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

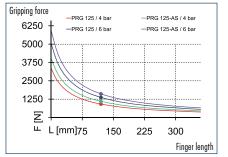
► 180°



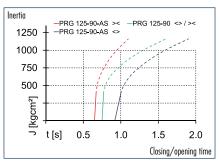
Pneumatic • 2-Finger Radial Gripper • Universal Gripper



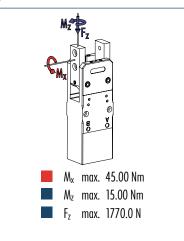
Gripping force, O.D. gripping



Maximum admissible inertia J



Finger load



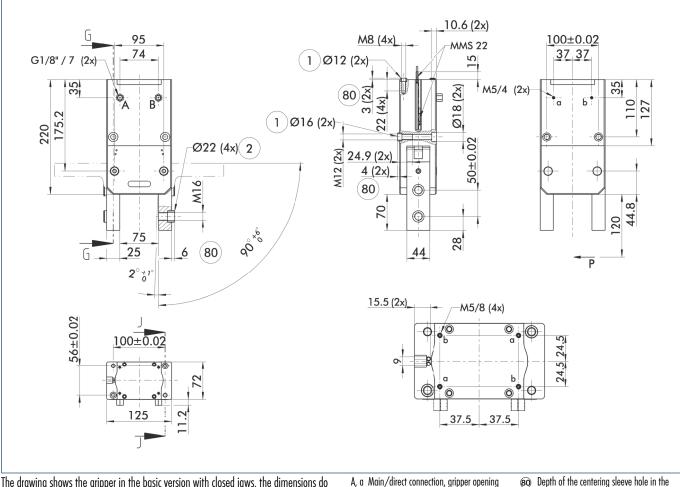
The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description		PRG 125-30	PRG 125-30-AS	PRG 125-60	PRG 125-60-AS	PRG 125-90	PRG 125-90-AS
ID		0303658	0303668	0303698	0303708	0303678	0303688
Opening angle per jaw	[°]	30	30	60	60	90	90
Closed angle per jaw up to	[°]	4	4	4	4	4	4
_Closing moment	[Nm]	225	295	225	295	225	295
Spring-actuated closing moment	[Nm]		70		70		70
Weight	[kg]	6.49	6.72	6.48	6.71	6.46	6.69
Recommended workpiece weight	[kg]	6.96	9.12	6.96	9.12	6.96	9.12
Air consumption per double stroke	[cm³]	475	475	520	520	580	580
Min./max. operating pressure	[bar]	2/8	4/6.5	2/8	4/6.5	2/8	4/6.5
Nominal operating pressure	[bar]	6	6	6	6	6	6
Closing time	[s]	0.25	0.22	0.5	0.43	0.75	0.65
Opening time	[s]	0.25	0.31	0.5	0.61	0.75	0.92
Max. permitted finger length	[mm]	240	240	240	240	240	240
Max. mass moment of inertia per jaw	[kgcm ²]	386.8	386.8	386.8	386.8	386.8	386.8
IP class		20	20	20	20	20	20
Min./max. ambient temperature	[°(]	-10/90	-10/90	-10/90	-10/90	-10/90	-10/90
Repeat accuracy	[mm]	0.1	0.1	0.1	0.1	0.1	0.1
OPTIONS and their characte	ristics						
High-temperature version		39303658	39303668	39303698	39303708	39303678	39303688
Min./max. ambient temperature	[°(]	-10/130	-10/130	-10/130	-10/130	-10/130	-10/130



Main view



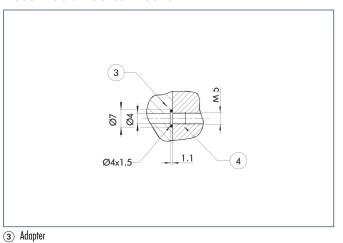
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

- The SDV-P pressure maintenance valve can also be used for I.D. or O.D. gripping alternatively or in addition to the spring-loaded, mechanical gripping force maintenance device (see "Accessories" catalog section).
- B, b Main/direct connection, gripper closing

matching part

- (1) Gripper connection
- Finger connection

Hose-free direct connection



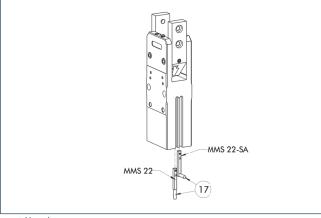
⁽⁴⁾ Gripper

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.



Pneumatic • 2-Finger Radial Gripper • Universal Gripper

Electronic magnetic switches



(17) Cable outlet

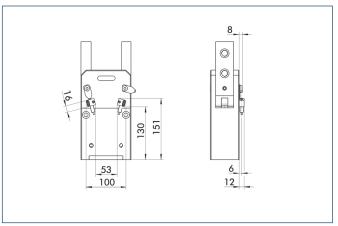
End position monitoring for mounting in the C-slot

Description	ID	Recommended product
Electronic magnetic switches		
MMS 22-S-M5-PNP	0301438	
MMS 22-S-M5-NPN	0301439	
MMS 22-S-M8-PNP	0301432	•
MMS 22-S-M8-NPN	0301433	
MMSK 22-S-PNP	0301434	
MMSK 22-S-NPN	0301435	
Electronic magnetic switches with	lateral cable outlet	
MMS 22-S-M5-PNP-SA	0301448	
MMS 22-S-M5-NPN-SA	0301449	
MMS 22-S-M8-PNP-SA	0301442	•
MMS 22-S-M8-NPN-SA	0301443	
MMSK 22-S-PNP-SA	0301444	
MMSK 22-S-NPN-SA	0301445	
Connection cables		
KA BG05-L 3P-0300	0301652	
KA BGO8-L 3P-0300-PNP	0301622	
KA BGO8-L 3P-0500-PNP	0301623	
KA BW05-L 3P-0300	0301650	
KA BW08-L 3P-0300-NPN	0301602	
KA BWO8-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-NPN	9641116	
KA BW08-L 3P-0500-PNP	0301502	
Cable extensions		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

Mounting kit for proximity switch



The mounting kit consists of brackets, control cams and appropriate fastening materials. Proximity switches have to be ordered separately.

Description	ID
Mounting kit for proximity switch	
AS-PRG 125-IN80	0303628

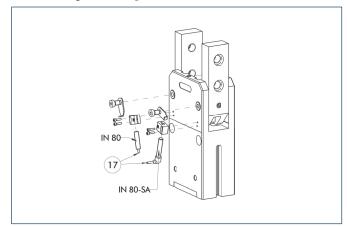
You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.



Ŧ



Inductive proximity switches



(17) Cable outlet

End position monitoring mounted with mounting kit

Description	ID	Recommended product
Mounting kit for proximity switch		
AS-PRG 125-IN80	0303628	
Inductive proximity switches		
IN 80-S-M8	0301478	•
IN 80-S-M12	0301578	
INK 80-S	0301550	
Inductive proximity switch with la	teral outlet	
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	•
INK 80-S-SA	0301566	

Two sensors (closer/NO) are required for each gripper, plus extension cables as an option.

Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.

180°

